

## AUTONOMOUS STATION KEEPING SYSTEM FOR FORMATION FLIGHT

### ABSTRACT OF THE DISCLOSURE

5 A system for autonomously keeping an aircraft's station in a formation flight of a plurality of aircraft includes a navigation system configured to determine a position of an aircraft. A data link is configured to allow the aircraft to communicate data with at least one other aircraft in the formation flight of the plurality of aircraft. A sensor is configured to detect a presence of another aircraft within a predetermined distance of the aircraft. A processor is configured to provide control signals to the aircraft's autoflight system to keep the aircraft at a predetermined station relative to the other of the plurality of aircraft in the formation flight.

10



25315

PATENT TRADEMARK OFFICE

- 23 -

BOEI-1-1204AP

BLACK LOWE & GRAHAM<sup>PLLC</sup>



816 Second Avenue  
Seattle, Washington 98104  
206.381 3300 • F• 206 381 3301